

62

[1959]

Descriptive Catalog



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VEGETABLE VARIETIES *for* CANNERS and FREEZERS

Michael-Leonard
Company

MICHAEL-LEONARD COMPANY
BOX 777
DAVENPORT, - IOWA

~~SIoux CITY 2, IOWA~~

I N D E X

Beans, Wax	2
Beans, Green Podded.....	3-4
Beans, Lima.....	5
Beets	5
Cabbages	5-6
Carrots	6
Cauliflower	7
Sweet Corn, Yellow Hybrids.....	8-9-10-11-12-13
Sweet Corn, White Hybrids.....	14-15-16
Cucumber	17
Dill	17
Mustard	17
Okra	18
Onions	18
Peas, Smooth Seeded.....	19
Peas, Wrinkled Seed.....	19
Peppers	20
Pumpkin	20
Spinach	21
Squash	21
Tomatoes.....	22-23
Rutabaga	23
Turnip	23
Reference Tables	24

FOREWORD

SCIENCE is the source and servant of successful nations. The high standard of living in America is due in large measure to discoveries of science and their prompt and practical application to business use.

Modern plant breeding has been one of the most productive branches of science in promoting the betterment of mankind. For more than seventy years the Michael-Leonard Company has been alert in bringing promptly to seed users the best that plant breeding could create. Our quick and practical appraisals of new varieties from public sources give you dependable selections from our catalog without a tedious testing program of your own. In addition, our comprehensive company breeding program continues to develop for you new and more profitable seed varieties not obtainable elsewhere.

This research work embraces all the major vegetable types but we have a special interest in sweet corn. Our breeding specialists began working with hybridization of corn in 1920. We offer for your service more years of experience in this important field than any other major seed producer. No matter where you live, we urge you to take advantage of our counsel on hybrid sweet corn. There are five Michael-Leonard All-America winners included in our hybrid sweet corn series ranging from 58 to 98 days in maturity (based on Midwestern day length).

Our company is composed of Seedsmen, not just merchants. Wherever sweet corn is grown we can help improve the crop. We welcome that opportunity. You can place your confidence in the seed varieties we grow and describe in the pages of this catalog.

MICHAEL-LEONARD COMPANY

Dr. Stuart H. Smith
Research Director

333-55 W. 35th St.
Chicago 16, Illinois

Research Department
Ames, Iowa

21st & Clark St., Box 1048
Sioux City 2, Iowa

Production Branches Located in Dependable Irrigated Western Areas

Vegetable VARIETIES

Adapted for

CANNING and FREEZING

BEANS

WAX

BRITTLEWAX (Round Pod Kidney Wax)—56 days

PODS—6 inches long, stringless and fiberless, round, fleshy and of excellent quality.

PLANT—Medium green leaves, vigorous growing and spreading. 16" to 18" tall.

SEED—White with dark brown to black eye and kidney shaped.

USE—Freezing and cut beans.

KINGHORN WAX (White Seeded Brittlewax)—55 days

PODS—6" long, stringless, round, slightly curved, golden yellow.

PLANT—Medium large leaves, medium green color, upright, 16" to 18".

SEED—Pure white.

USE—Freezing and canning. Very productive and growing in popularity.

PENCIL POD BLACK WAX—58 days

PODS—6" x 7/16" to 1/2", semi-round to round, stringless, fleshy, golden yellow.

PLANT—15" to 17", vigorous, medium green leaves, prolific.

SEED—Small, oblong, black.

USE—Freezing and cut beans.



Mosaic Resistant Beans (right), Susceptible (left), Michael-Leonard Breeding Field

GREEN PODDED

BOUNTIFUL—50 days

PODS— $6\frac{1}{2}$ " to 7" x $\frac{1}{2}$ ", light green, thick flat, stringless but fibrous except in the young stage.

PLANT—16" to 20", upright, medium green, vigorous and prolific.

SEED—Yellow.

USE—Good for early local market, shipping and French cut for canning.

CONTENDER—49 days

POD— $5\frac{1}{2}$ " x $7/16$ ", semi-round. Flesh thick, fiberless and stringless, medium dark green.

PLANT—14" to 16", vigorous, mosaic resistant, very prolific, pods borne low.

SEED—Medium large, long oval, excellent for green shelled as well as snap beans.

USE—Canning and freezing.

GIANT STRINGLESS GREEN POD—53 days

POD—6" x $\frac{1}{2}$ " to $5/8$ ", round, stringless, brittle and fleshy, straight, medium to light green.

PLANT—16" to 18", erect, medium green and prolific.

SEED—Oval, brownish yellow.

USE—Freezing and cut beans.

BURPEE'S STRINGLESS GREEN POD, IMPROVED—54 days

POD— $5\frac{1}{2}$ " to 6" x $3/8$ ", round, medium green, stringless and slightly curved. Good quality.

PLANT—16" to 21", erect, stands considerable drouth, medium green and vigorous.

SEED—Dark brown.

USE—Freezing and cut beans.



Prolific New Bean Introduction—Contender

BEANS—Continued

IDAHO REFUGEE—64 days

PODS—5" to 5 $\frac{1}{4}$ " x 5/16" to 3/8", round, straight to slightly curved, fleshy, stringless. Excellent quality.

PLANT—16" to 20", upright, spreading, medium green, small leaves, vigorous, prolific and mosaic resistant.

SEED—Bluish purple splashed with buff.

USE—Whole or cut beans for canning.

This is a cross made from Michael-Leonard's Corbett Refugee, the first mosaic resistant Refugee.

SEMINOLE—55 days

PODS—6" to 6 $\frac{1}{2}$ ", long, slender, smooth, emerald green, stringless, becoming fibrous in advance stages. Has a very "beany" flavor.

PLANT—18" to 20", upright, sturdy, prolific, bush. Resistant to mildew, rust, and common bean mosaic.

SEED—Mottled brown with buff.

USE—Canning, freezing and shipping.

This variety was introduced by the Florida Experimental Station and was a Silver Medal winner of the All American Trial for 1955.

TENDERGREEN—53 days

PODS—5 $\frac{1}{2}$ " to 6" x 1/2", round, stringless, fiberless, fleshy, thick, medium to dark green, good quality.

PLANT—16" to 20", erect, heavy, leaves dark green, fairly heat resistant.

SEED—Large, oval, purplish brown blotched with medium brown.

USE—Freezing and canning.

TOPCROP—50 days

PODS—6" x 3/8" to 7/16", slightly creaseback, fleshy, thick, very slender when young, straight, smooth. Stringless and without fibers. Medium to dark green.

PLANT—16" to 20", medium light green, erect, vigorous, very prolific and mosaic resistant.

SEED—Purplish-brown mottled, oblong.

USE—Freezing and canning.



Disease Resistant, Prolific New Introduction—Topcrop

BEANS—Continued

WADE—55 days

PODS— $5\frac{1}{2}$ " to $6\frac{3}{8}$ ", round, almost straight, very slightly curved, dark green.

PLANTS—18" to 21", erect, upright, holding pods well off the ground, light green, resistant to mosaic and mildew.

SEED—Reddish brown.

USE—Canning, freezing, market and long distance shipping.

LIMA

CANGREEN—70 days

PODS—3" x $\frac{3}{4}$ " to $\frac{7}{8}$ ", nearly straight, medium green, 3 to 4 small seeds. Bronze green color when ripe.

PLANT—14" to 18", upright, bushy, dark green, very prolific.

SEED—Small, thick, deep green.

USE—Freezing and canning.

FORDHOOK BUSH—74 days

PODS—4" to $4\frac{1}{2}$ " x $1\frac{1}{8}$ ", 3 to 4 seeds, medium green, straight, thick and plump.

PLANT—16" to 19", fairly hardy, bushy, erect, dark green.

SEED—Pale green in edible stage, thick, plump and oval shaped.

USE—Freezing and canning.

FORDHOOK NO. 242—74 days

PODS— $3\frac{3}{4}$ " x 1" to $1\frac{1}{8}$ ", shorter than regular Fordhook, otherwise similar.

PLANT—16" to 20", upright, very productive, bushy, dark green. Withstands adverse weather conditions better than regular Fordhook.

SEED—Thicker and slightly smaller than regular Fordhook.

USE—Freezing and canning.

HENDERSON BUSH—65 days

PODS—3" to $3\frac{1}{4}$ " x $\frac{3}{4}$ " to $\frac{7}{8}$ ", 3 to 4 small seeds, almost straight, medium green, flat.

PLANT—16" to 18", bushy, glossy, very hardy, prolific.

SEED—Small, almost round, white, flat.

USE—Freezing and canning.

PEERLESS (U. S. D. A. 243)—70 days

POD—3" to $3\frac{1}{2}$ " x $\frac{7}{8}$ " to 1", slightly curved, 3 to 4 small seeds.

PLANT—16" to 18", very similar to Henderson except the leaf is larger, and a medium green.

SEEDS—Medium green when young, round, thick.

USE—Freezing and canning.

BEETS

PERFECTED DETROIT—70 days

TOPS—16" to 19", broad oval leaf blades, dark green tinged with deep red.

INTERIOR COLOR—Blood red, uniform.

ROOT—Globular shape at dicing stage, smooth skin.

USE—Canning.

CABBAGE

GLOBE or GLORY OF ENKHUIZEN (Yellows Resistant)—80 days

HEADS—6" to 7" in diameter, weighing 5 to 6 lbs., solid, round, excellent quality.

PLANT—14" to 16", medium dark green with bluish cast, spreading leaves, curved upward.

USE—Kraut.

CABBAGE, Continued

MARION MARKET or COPENHAGEN MARKET (Yellows Resistant)

—78 days

HEADS—Weight 4 to 6 lbs., fine grained, deep round head, 8" in diameter.

PLANT—Medium size, 14" to 18", short stem, deep blue-green leaves.

USE—Kraut, storage.

WISCONSIN BALL HEAD (Yellows Resistant)—100 days

HEADS—Weight 6 to 7 lbs. Globular to flattened globe 7" to 8", round, compact.

PLANT—Blue-green foliage, short stem, 14" to 16".

USE—Kraut and storage.

WISCONSIN HOLLANDER No. 8 (Yellows Resistant)—100 days

HEADS—Weight 6 to 8 lbs., compact, uniform, 6" to 8" in diameter.

PLANT—Upright leaves, blue-green, 16" to 20".

USE—Kraut and storage.

RED HOLLANDER (Yellows Resistant)—100 days

HEADS—Weight 6 to 7 lbs., solid, oval globe, 6½" to 7" in diameter.

PLANT—Purple red, 14" to 15" high.

USE—Kraut and storage.

COPENHAGEN MARKET—66 days

HEADS—Solid, fine to medium textured, weight 8 to 9 lbs.

PLANT—Medium blue green, compact, short stem, cup shaped, 12" to 16".

USE—Kraut and storage.

DANISH BALL HEAD—100 days

HEADS—6 to 7 lbs., 8" in diameter, solid, good keeper, flattened globe shape.

PLANT—Medium large leaves, upright leaves, blue green, 12" to 14".

USE—Kraut and storage. Good keeper.

GLORY OF ENKHUIZEN—80 days

HEADS—Weight 5 to 6 lbs., interior creamy white, solid, nearly round.

PLANT—14" to 16", large leaves, color medium blue tinged green.

USE—Kraut.

PENN STATE BALL HEAD—115 days

HEADS—Solid, deep oval flattened globe shape, weighing 5 to 6 lbs., small to medium core. Excellent keeper.

PLANT—Large leaves, medium size, upright, 12" to 16".

USE—Kraut and storage.

CARROT

CHANTENAY RED CORED—70 days

TOPS—14" to 18", strong top, moderately coarse foliage.

INTERIOR COLOR—Uniform, reddish orange, flesh tender and sweet.

ROOTS—5" to 6" x 2½", roundish shoulders, stump rooted with refined tap root.

USE—Freezing and canning.

LONG or GREATER CHANTENAY—70 days

TOPS—16" to 20", medium dense foliage, strong top.

INTERIOR COLOR—Medium to reddish orange.

ROOTS—6" to 6½" x 2", heavy shoulder, stump rooted.

USE—Canning and market.

SCARLET NANTES—70 days

TOPS—12" to 14", small collar, strong tops.

INTERIOR COLOR—Base orange skin, cortex and core.

ROOTS—Excellent quality, 6½" to 7" x 1¼", uniformly cylindrical.

USE—Market, canning and freezing.

CAULIFLOWER

EARLY SNOWBALL—60 days

HEADS—6" to 7" in diameter, compact, creamy white, excellent quality and flavor, weighs $1\frac{1}{2}$ to 2 lbs.

PLANT—Dwarf, compact in growth, leaves erect and short, color pale blue green.

USE—Canning and freezing.

SUPER-SNOWBALL—56 days

HEADS—Approximately $6\frac{1}{2}$ " to 7", solid, compact, snowy white, weighs about $1\frac{3}{4}$ lbs. Excellent quality.

PLANT—Dwarf, spreading type, uniform, pure white.

USE—Canning, freezing and shipping.

SNOWDRIFT—60 days

HEADS—6" to 7" in diameter, weighs $1\frac{3}{4}$ to 2 lbs., solid and compact, white, excellent quality.

PLANT—Somewhat larger than Snowball, long, large, erect leaves.

USE—Freezing, canning and shipping.



Special Cannners' Strain Carrot Seed Field—Idaho

SWEET CORN

YELLOW HYBRIDS

ALPHABEST (Y)—65 days

Originated by Michael-Leonard Company

EAR—9" long, 8 to 10 rows, medium yellow, excellent quality, sweet and tender with well filled tips, long protecting husks; smut resistant.

PLANT—5½ ft. tall, vigorous, makes good early growth, dark green, drouth resistant.

USE—Canning, whole ear pack; market garden and home garden and freezing. A new introduction in the early class. A fine corn for the home gardener as well as bringing in a good early price for the market gardener. Unusually perfect ears. Very uniform.

ARISTOGOLD BANTAM EVERGREEN (Y)—87 days

Originated by Michael-Leonard Company

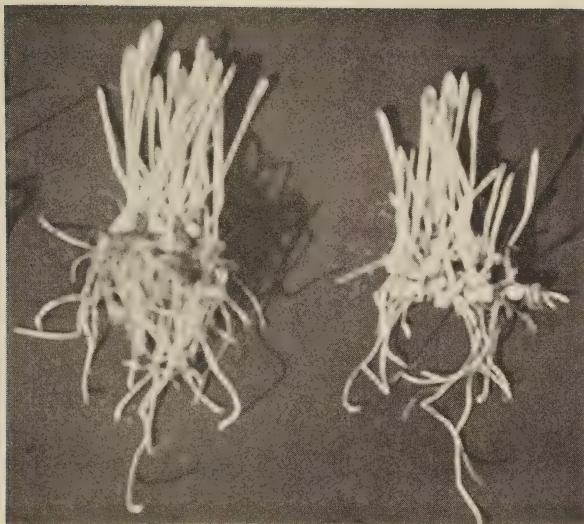
EAR—9" to 10" long, 16 to 18 rows, medium yellow kernels, good flavor, average texture, well filled tips.

PLANT—8 to 9 ft. tall, very vigorous, dark green foliage, drouth resistant, high yields, picks mechanically. Very wilt resistant.

USE—Canning, cream style corn, market garden, southern shipper. Big ears and the most dependable production you can buy have made this one of the most widely used in America. Very outstanding throughout the South. Produces a good crop where many other varieties fail. Fancy edible period 85 to 90 days.



Michael-Leonard Company Sweet Corn Breeding Field at Ames, Iowa



*Results of Power-Pak Treated Seed (left) Compared with Untreated (right)
on the root growth of sweet corn*

CREAMCROSS (Y)—84 days

Originated by Michael-Leonard Company

EAR—8½" to 9", cylindrical, deep kernels, rich yellow. Ears have 16 to 18 rows with good flavor and average to good texture.

PLANT—6½ to 7 ft., shows fast early growth and very high yields, surpassing most other productive kinds. Widely adapted as to soil type.

USE—Excellent cream style with low production cost and good appearance and quality in the can.

DELIGOLD (Y)—83 days

Originated by Michael-Leonard Company

EAR—9", very perfect in set of kernels clear to the tip. Has good husk protection, good flavor and texture with white silks. It is mostly 14 rowed with small cobs and deep kernels.

PLANT—Vigorous and uniform like the ears. Very dark green leaves, excellent resistance to drouth and more smut resistance than Golden Cross. Roots are stronger with less lodging.

USE—Freezing cream style or whole kernel. Has low cost per ton of cut corn because of high cut and high percentage of perfect ears.

EVERTENDER (Y)—78 days

Originated by Michael-Leonard Company

EAR—8" to 8½", mostly 14 to 16 rows, bright yellow. Hulls are thin and very slow to toughen even when over ripe, flavor and sweetness superb. Deep kernels with small cobs.

PLANT—6 ft., thrifty grower, high yields for early corn. Easy to get good stands.

USE—Whole kernel canning, freezing or any garden use. Closely resembles Tendermost in the can and being earlier, extends the season. Unsurpassed for delicious eating quality, whether canned or frozen.

EVERTENDER C (Y)—78 days

Originated by Michael-Leonard Company

EAR—8" long, mostly 16 to 14 rows, brilliant yellow color. A little more orange than lemon. Thin pericarp with deep kernels, small cobs, well filled tips, good husk protection and high cutting percentage. Ears are perfect in appearance and well filled. If stand is thin, will produce two ears per plant and is one of the highest yielding early varieties.

PLANT—6 ft. Shows fast early growth rate and low cost per ton of cut corn. Shank medium length, just right for mechanical harvest.

USE—Whole kernel or cream style canning. Similar to Evertender but yields more and has darker green leaves.

SWEET CORN—Continued

GOLDEN CROSS BANTAM (Y)—83 days

Originated by Dr. Glenn Smith of Purdue University

EAR—7½" to 8" long, 12 to 14 rows, average kernel depth, medium yellow.

PLANT—6½ to 7 ft. tall, vigorous, wilt resistant, straw color tassels.

USE—Freezing, canning whole kernel or cream style.

One of the first sweet corn hybrids developed, this hybrid is still a favorite with many gardeners on account of its rich flavor. Fancy edible stage 80 to 85 days.

GOLDEN CROSS BANTAM, WHITE SILK (Y)—81 days

Originated by Michael-Leonard Company

EAR—8" long, mostly 14 rows, deeper than average kernel, medium yellow.

PLANT—6½ to 7 ft. tall, vigorous, dark green, wilt resistant, suckers moderately.

USE—Freezing and canning whole kernel or cream style. Clean white silks almost invisible if missed in packing.

This hybrid has all the good qualities of regular Golden Cross, plus pure white silks. You will be surprised at the clean wholesome appearance because of the almost indistinguishable silk fragments.

GOLDENGRAIN (Y)—87 days

Originated by Michael-Leonard Company

EAR—9" long, 18 to 22 rows, exceptionally deep kernels, medium yellow, quality fair to good.

PLANT—8 to 9 ft. tall, very vigorous, drouth resistant, dark green foliage, high yields, picks mechanically.

USE—Canning cream style.

Another winner in the All-America Selections. A big spectacular corn with deep tender kernels. An excellent variety throughout the South. Has practically no suckers. Fancy edible period, 85 to 92 days.

GOLDEN REGENT (Y)—89 days

Originated by Michael-Leonard Company

EAR—9" long, 20 to 22 rows, with well filled tips. Very deep kernels, long husk over tips. Good flavor, fair to good texture.

PLANT—7 to 8 ft., deep rooted and stands heat and drouth. Very high yielding, single eared with practically no suckers.

USE—Cream style canning or whole kernel in Southern Cornbelt or deep South.



September Sweet Corn Seed Harvest in Idaho
Seed Is Hand Harvested to Insure Top Vitality



Michael-Leonard Tendermost Has High Cutting Percentage and Low Net Cost

GOLDENSTATE (Y)—86 days

Originated by Michael-Leonard Company

EAR—8½" to 9" long, 14 rows, cylindrical, rich yellow, prolific, good tips.

PLANT—8 ft. tall, dark green, smut resistant.

USE—Canning cream or whole kernel, freezing, southern shipper.

Newest All-America winner from Michael-Leonard. A fine corn for the home and market gardener in the South and deep South. It has a rich golden color that makes it very attractive on the table.

GOLDENYIELD (Y)—87 days

Originated by Michael-Leonard Company

EAR—9" to 9½" long, 14 to 16 rows, long slim, well filled at tip, good husk cover, often two good ears per stalk. Sweet rich flavor, average texture.

PLANT—8 ft., very drouth and heat resistant, shows less earworms than most kinds. Has deep roots, seldom lodges.

USE—Excellent shipper, good cream style especially where high yield and low cost are desired and in areas subject to heat or drouth.

IOCHIEF (Y)—86 days

Originated by Dr. E. S. Haber of Iowa State College

EAR—8" to 9" long, 14 to 18 rows, good flavor, fair to good texture, brilliant yellow, deep kernels.

PLANT—7 to 7½ ft. tall, few suckers, dark green, drouth resistant, good yields.

USE—Canning whole kernel and cream style.

A fine variety for the home garden. Produces large ears on large stalks. The yields are high and the fancy edible period is 85 to 88 days.

LONGCHIEF (Y)—85 days

Originated by Michael-Leonard Company

EAR—9½" to 10" long, mostly 18 rows. Flavor and texture are the best of the large eared varieties. Cylindrical ears, well filled at the tip with ideal husk cover.

PLANT—7 ft., drouth resistant, practically no suckers. Unusually good uniformity with tremendous yields.

USE—Dual purpose cream or whole kernel canning or where a large showy ear of good quality is desired. The large uniform single ear per plant reduces labor cost in handling and sorting.

SWEET CORN—Continued

NARROGOLD (Y)—85 days

Originated by Michael-Leonard Company

EAR—8½" to 9" long with 18 to 20 rows. Deep kernels with very fine appearance, flavor and texture. Sparkling brilliant yellow.

PLANT—7 to 7½ ft., vigorous grower, dark green, resistant to heat and drouth, high dependable yields. Suckers sparsely and is quite resistant to lodging.

USE—Fancy whole kernel or cream style canning where a delicate, very narrow kernel is needed.

TENDERBLONDE (Y)—84 days

Originated by Michael-Leonard Company

EAR—8" to 9" long, mostly 16 rows, brilliant yellow, excellent quality, good holding power in the field. White silks, hard to detect.

PLANT—7 to 8 ft. tall, dark green, very few suckers, drouth resistant, picks mechanically.

USE—Freezing and canning whole kernel and cream style.

This new hybrid is a little larger than Golden Cross, deeper kernels, clean white silks and longer holding in the field. A fine new up-to-date hybrid with the rich good flavor that made Golden Cross famous. Fancy edible period 81 to 86 days.

TENDERCHIEF (Y)—85 days

Originated by Michael-Leonard Company

EAR—8" to 9" long, 14 to 18 rows, rich yellow, deep kernels. Has very crisp and tender texture.

PLANT—7 to 8 ft. tall, very sparse suckers, drouth resistant with unusually high yields. Smut and wilt resistant.

USE—Whole kernel and cream style canning or market garden or freezing. Crisp, tender kernels make processed product resemble garden fresh corn. Always dependable, top level yields.

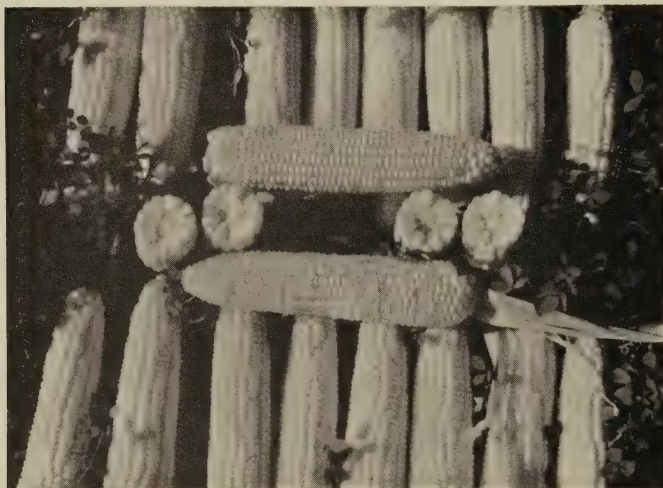
TENDERFREEZER (Y)—83 days (ML 711)

Originated by Michael-Leonard Company

EAR—9" to 10" long with small cobs. Texture very tender with unusually high sugar content. Bright gold, lustrous kernels at medium depth. Colorless silks are nearly invisible.

PLANT—6 to 6½ ft. tall, often two-eared on good soil, sparse suckers, high yield in dozens per acre.

USE—Ideal for freezing or packing on the ear. Long slim ears with colorless silks make ears attractive and high sugar and tender kernels make this variety very popular.



Evertender—A Major Improvement Resembling Tendermost, But Earlier



Longchief—Highest Quality of the Big Eared High Yielding Types

TENDERMOST (Y)—85 days

Originated by Michael-Leonard Company

EAR—9" long, 14 to 18 rows, brilliant yellow, holds very well in the field, excellent quality. Very deep kernel, small cob.

PLANT—7 to 7½ ft. tall, dark green, sparsely suckered, picks well mechanically, wilt resistant.

USE—Freezing, canning whole kernel or cream style, market and home gardeners. Of all the hybrids we have developed, this is the most tender and succulent. Large ears, deep sugary-sweet kernels. This corn stays sweet and tender on the stalk for nearly two weeks. Fancy edible stage 81 to 91 days. Make successive plantings in the northern half of the United States from early May to mid-July for continuous summer crops.

TENDERMOST H (Y)—85 days

Originated by Michael-Leonard Company

EAR—9 to 9½" long. 16 to 18 rows, has long holding quality in the field with deep kernels and small cobs. Very much like Regular Tendermost.

PLANT—Mostly 7½ ft. tall, dark green, fewer suckers with longer ears and frequently yields up to one ton more than Regular Tendermost.

USE—Canning whole kernel, freezing or cream style. Very similar to the highly popular Tendermost variety but produces higher yields and longer ears.

TENDERMOST W.R. (Y)—86 days

Originated by Michael-Leonard Company

EAR—Similar to regular Tendermost but about ½" longer, with slightly finer kernels, mostly 16 to 18 rowed. Quality equal.

PLANT—Also similar to regular Tendermost but about 6" taller, and highly wilt resistant.

USE—Whole kernel canning or freezing for the strictly fancy packer. Unusually high cutting per cent assures low cost for a top quality product.

TENDERMOST 20 (Y)—85 days

Originated by Michael-Leonard Company

EAR—9", similar to Tendermost but mostly 18 to 22 rows. Deep kernel, high cutting per cent. Kernels look small and fine even on older ears. Fine flavor and texture, holds well.

PLANT—7 to 7½ ft., few suckers, stands heat and drouth well for fancy variety. Resists wind damage. Thrifty early growth.

USE—Whole kernel canning, whole kernel component in Cremogenized corn, freezing or fresh market. Best where very refined kernel appearance is important without big coarse cobs.

SWEET CORN—Continued

WHITE HYBRIDS

SILVER CROSS BANTAM (W)—83 days

Originated by Michael-Leonard Company

EAR—8" to 9" long, 12 to 14 rows, snow white, good kernel depth, has flavor like Golden Cross, very rich.

PLANT—6½ to 7½ ft. tall, vigorous, widely adapted, good yielder, picks mechanically.

USE—Canning whole kernel or cream style.

If you like white corn, don't miss this one. Silver Cross Bantam has the same high quality that Golden Cross possesses. In fact, they look alike except Silver Cross is white. Fancy edible stage 80 to 86 days.

SILVER CROSS EVERGREEN (W)—87 days

Originated by Michael-Leonard Company

EAR—8" long, 16 rows of pure white kernels, high sugar and good quality.

PLANT—7½ to 8½ ft. tall, heavy stalk, dark green, grand yielder, picks mechanically.

USE—Canning, whole kernel, cream style.

Sweeter, larger ears, better quality than most white types. A fine Evergreen type for your home garden. Fancy edible stage 85 to 90 days.



Creamcross—A Tremendous Yielder with Ideal Quality for Cream Style



Tenderchief—Outstanding Dual Purpose Cream or Whole Kernel; Heat, 'Drouth and Wilt Resistant

NARROWMOST (W)—91 days

Originated by Michael-Leonard Company

EAR—8" to 9" long, 18 to 22 rows of extra deep white kernels.

PLANT—8 ft. tall, heavy stalk, productive and of dark green color, picks well mechanically.

USE—Canning whole kernel or cream style.

For a corn that gives you big ears and high yields, deep, tender and sweet kernels, use Narrowmost. Fancy edible period 87 to 92 days.

IOGREEN 16 (W)—93 days

Originated by Dr. E. S. Haber, Iowa State College

EAR—7" to 8" long, 16 to 18 rows, good length, fair quality.

PLANT—7 to 8 ft. tall, vigorous, dark green, free of suckers, picks mechanically.

USE—Canning cream style.

FINEGRAIN COUNTRY GENTLEMAN (W)—92 days

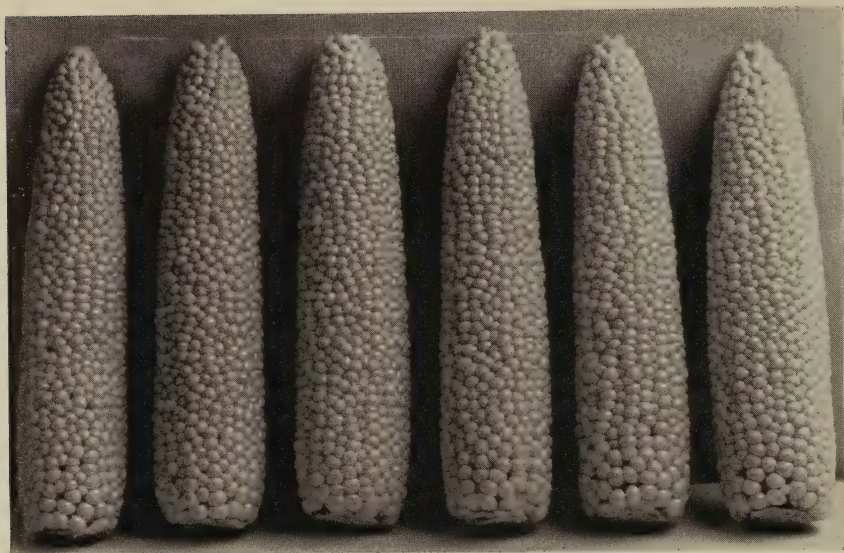
Originated by Michael-Leonard Company

EAR—8" to 9" long, zigzag, fine snowy white kernels, small cob, well filled tips.

PLANT—7 ft. tall, drouth resistant, high yielding, less ear worms than most Shoepeg types.

USE—Canning whole kernel or cream style.

If you like Country Gentleman type corns, try this new hybrid in your garden. We are sure you will like it. It possesses tiny kernels and has a rich choice flavor. Fancy edible period 89 to 94 days.



Introducing Finegrain Country Gentleman—For Fancy Shoepeg Pack

SWEET CORN—Continued

SILVERGENT (W)—87 days

EAR—8½" to 9½" long, 16 to 18 rows of very narrow, sweet, tender and remarkably fine kernels, resembling Shoepeg, one of its parents.

PLANT—7 to 8 ft. tall, drouth-resistant, thriftier growth than Country Gentleman.

USE—Canning whole kernel or cream style or a fancy freezer. Very crisp tender kernels with the finest flavor of the white varieties. Easier to grow and better to eat than Country Gentleman, which it often replaces.

SILVER CROSS STOWELL'S (W)—94 days

Originated by Michael-Leonard Company

EAR—7" to 8" long, 16 to 18 rows, good depth, quality good.

PLANT—7 to 8 ft. tall, dark green, sturdy, picks mechanically.

USE—Canning cream style.

If you've ever planted open pollinated "Stowell's Evergreen" you'll be sure to like Silver Cross Stowell's even better. Better yields, stronger plants and of superior quality. Fancy edible period 93 to 97 days.

WHITE TENDERMOST (W)—83 days *Originated by Michael-Leonard Company*

EAR—8½" to 9" long, 14 to 16 rows, crisp, rich flavor, medium deep kernels, small cobs.

PLANT—7 ft. tall, withstands drouth, good mechanical picker.

USE—Canning cream style or whole kernel.

This new hybrid has all the good qualities of the regular Tendermost, except it is white. For rich flavor, tender kernels and good yields plant some White Tendermost. Fancy edible period 82 to 89 days.

CUCUMBER

CHICAGO PICKLING, b.s.—57 days

FRUIT—5" to 7" x 2½" to 2¾", square ends, pickles are uniform, cylindrical and dark green.

VINE—Hardy, vigorous and good leaf coverage.

USE—Fine for dills.

NATIONAL PICKLING, b.s.—54 days

FRUIT—6" x 2½" to 3", dark green, blunt ends and cylindrical.

VINE—Medium large dark green leaves. Vigorous and prolific.

USE—Small sized pickles and dills.

GHERKIN, WEST INDIA, b.s.—60 days

FRUIT—1½" to 2" x 1", small, oval shape, light green, uniform. Covered with short prickling spine.

VINE—Strong, vigorous grower, good yielder, small. Leaves similar to watermelon.

USE—For fancy pickle packs.

EARLIEST OF ALL, w.s.—60 days

FRUIT—1¾" to 2" x 1¼", light green, small oval shape.

VINE—Small but vigorous and a good yielder. Covers fruit well.

USE—Fancy pickles.

SNOW'S PERFECTION PICKLE, b.s.—56 days

FRUIT—2½" x 5", dark green and cylindrical, blunt ends, excellent quality.

VINE—Vigorous, medium leaf coverage.

USE—Dills.

WISCONSIN SR No. 6 (Spot-rot resistant) b.s.

FRUIT—5½" to 7" x 2½" to 3", dark green, cylindrical.

VINE—Dark green, vigorous, productive. Originated by Dr. Walker, University of Wisconsin, as a spot-rot resistant National Pickle type.

USE—Dills, where spot-rot prevalent.

WISCONSIN SMR 12 (Both spot-rot and mosaic resistant) b.s.

FRUIT—5½" to 7" x 2½" to 3", dark green, cylindrical.

VINE—Dark green, vigorous, productive.

USE—Dills, where both spot-rot and mosaic are prevalent.

DILL

LONG ISLAND MAMMOTH

PLANTS—Vigorous grower, leaves fine, grows 2" to 2½" tall.

SEED—Very flat, brown.

USE—Flavoring for pickles.

MUSTARD

CHINESE BROAD LEAF—40 days

PLANT—Medium green, spreading type, productive and 10" tall.

SEED—Reddish brown.

SOUTHERN GIANT CURLED—40 days

PLANT—Upright in growth, very large, spreading, medium yellowish-green. 10" tall.

SEED—Reddish brown.

MUSTARD-SPINACH or TENDERGREEN—35 days

PLANT—Rapid growing, glossy dark green, spreading, heat and drouth resistant.

SEED—Does not bolt seeds quickly; dark reddish brown.

OKRA

CLEMSON SPINELESS—55 days

PODS—6" to 8", tapered at tip, rich green, fluted, good quality.

PLANT—4¼ to 4½ ft. tall, prolific, similar to Perkins Mammoth Podded.

USE—Canning.

GREEN VELVET—58 days

PODS—

PLANT—5 to 5½ ft. tall, erect, very prolific, pods borne close to stalk.

USE—Canning. Retains original color when processed.

PERKINS MAMMOTH LONG PODDED—57 days

PODS—7" to 8", deep green, tapered, fleshy and of excellent quality.

PLANT—4½ ft. tall, productive and carries a heavy foliage.

USE—Canning.

WHITE VELVET—58 days

PODS—6" to 7" long, creamy white, straight, smooth, fleshy and good quality.

PLANT—4 to 5 ft. tall, prolific.

USE—Canning.

ONION

WHITE EBENEZER—100 days

BULB—Flat but thick, clear white, medium size and solid. Good keeper.

USE—Sets and pickling.

WHITE PORTUGAL or SILVERSKIN—100 days

BULB—White, solid and fine grained, flat and medium sized.

USE—Pickling and sets.



Pickling Type Onion Field—Idaho



Stuart's Perfection—A Wilt and Drouth Resistant Type

PEAS

SMOOTH SEEDED

ALASKA HF 30—58 days

Originated by Michael-Leonard Company

PODS—2½" x ½", straight, light green, plump, mature, uniformly 6 to 8 peas.

VINE—30" to 36" tall, foliage light blue green. Resistant to Fusarium Wilt.

SEED—Medium blue green, small, round and smooth.

USE—Canning.

THRIFTIGREEN—68 days

Originated by Michael-Leonard Company

PODS—3¼" to 3¾" by ⅝", medium green, straight, mostly doubles, 7 to 9 peas.

VINES—26" to 30", medium green, wilt resistant, hardy as Alaska.

SEED—Medium green, smooth to dimpled, very uniform seed size and very thin hulls.

USE—Canning, where heat and drouth resistance, hardiness like Alaska and a productive small sieve size, low cost, high quality crop is desired.

WRINKLED SEED

ALDERMAN—75 days

PODS—4" to 5" x ½" to ⅝", blunt, dark green, plump, well filled, borne singly and contain 8 to 10 peas.

VINE—45" to 60", large leaves, large stems, prolific and a hardy grower.

USE—Canning and freezing.

EARLY PERFECTION—67 days

PODS—3½" x ⅝", borne singly and doubly, straight, plump.

VINE—28" to 30" tall, vigorous. Resistant to Fusarium Wilt.

SEED—Medium-green, medium size and wrinkled.

USE—Canning.

STUART'S PERFECTION WILT RESISTANT—70 days

Originated by Michael-Leonard Company

PODS—3" to 3½" x ⅝", medium green, doubles, straight, 6 to 8 peas.

VINE—20" to 30" tall, medium green and medium heavy stem.

SEED—Medium green, medium size and wrinkled.

USE—Canning.

THOMAS LAXTON WILT RESISTANT—63 days

PODS—3¼" to 3½" x ⅝", singles, blunt, dark green, 6 to 8 peas per pod.

VINE—30" to 38" tall, wilt resistant, medium heavy foliage, dark green.

SEED—Medium size, rounded, wrinkled and medium green.

USE—Freezing and canning.

PEPPER

CALIFORNIA WONDER (Sweet)—76 days

FRUITS—Diameter $3\frac{1}{2}$ " to 4", length 4" to $4\frac{1}{2}$ ", blocky four lobed, sweet flesh and thick walls, glossy dark green, becoming deep red at maturity.

PLANT—22" to 28" tall, upright, stocky and productive.

SWEET BANANA (Sweet)—65 days

FRUITS—Diameter $1\frac{1}{2}$ ", length $6\frac{1}{2}$ ", sweet, medium thick, small, light yellow color turning to bright red at maturity.

PLANT—20" to 24" tall, dark green, prolific, erect.

LONG SLIM CAYENNE (Hot)—70 days

FRUITS—Diameter at shoulder, $\frac{1}{2}$ " to 1", length 4" to 5", long, very slim, dark green changing to bright dark red when mature.

PLANT—24" to 30" tall, upright with bushy top, very vigorous.

PIMIENTO (Sweet)—79 days

FRUITS—Diameter $2\frac{1}{2}$ ", length $3\frac{1}{2}$ ", thick walled, sweet fleshed, heart shape, dark green, becoming bright crimson at maturity.

PLANT—26" to 30" tall, vigorous, erect, productive and dark green.

RED CHILI (Hot)—82 days

FRUITS—Diameter $\frac{1}{2}$ " at shoulder, length 2" to $2\frac{1}{2}$ ", cone shaped, pale yellow green turning to red, are of the hottest for pickles.

PLANT—18" tall, prolific, low spreading type.

RUBY KING (Sweet)—70 days

FRUITS—Diameter $2\frac{1}{2}$ " at shoulder, length 4" to 5", pendant, three lobed, mild to sweet, dark green changing to glossy red.

PLANT—22" to 26" tall, erect, vigorous, dark green.

PUMPKIN

CONNECTICUT FIELD—117 days

FLESH—Thick, orange yellow, coarse, dry and sweet.

FRUITS—10" to 14" deep, 12" to 14" in diameter, weigh about 20 to 25 pounds, slightly flattened at ends, orange yellow color.

USE—Canning.

EARLY SUGAR or PIE—115 days

FLESH—Fine textured, orange yellow, thick, sweet.

FRUITS—8" to 10" deep x 10" in diameter, dark orange, weighs 6 to 8 pounds. Excellent quality.

USE—Canning.

KENTUCKY FIELD—119 days

FLESH—Dark to yellow orange, coarse, very little fiber.

FRUITS—8" to 10" deep x 12" to 14" in diameter, weighing 10 to 14 pounds, vary in size. Outside is buff color.

USE—Canning.

SPINACH

BLOOMSDALE SAVOY, LONG STANDING—42 days

LEAVES—Heavily savoyed and crumpled, rounded, tender, thick, glossy, dark green. Quality good.

PLANT—Upright, vigorous, compact, bolts 10 to 14 days. Later than Bloomsdale Reselected. Stands hot weather better.

USE—Canning.

GIANT NOBEL—45 days

LEAVES—Medium green, thick, large broad leaves, smooth tapered to rounded tip.

PLANT—Vigorous, spreading, productive.

USE—Freezing and canning.

KING OF DENMARK—44 days

LEAVES—Glossy green, smooth, thick, tender and of medium size.

PLANT—Open spreading type and somewhat flat, slowest bolting of all varieties.

USE—Canning.

OLD DOMINION (BLIGHT RESISTANT)—40 days

LEAVES—Dark green, medium thick, tender, moderately crumpled.

PLANT—Rapid grower, semi-erect, foliage not too dense. Used for Fall planting.

USE—Canning.

VIKING—45 days

LEAVES—Thick, very large, broad, narrow and pointed, dark green and partially crumpled.

PLANT—Large and spreading, vigorous, long standing.

USE—Canning.

SAVOY LEAVED BLOOMSDALE—40 days

LEAVES—Good producer, dark green and crumpled.

PLANT—Erect in growth, vigorous, bolts to seed in hot weather.

USE—Canning.

SQUASH

BOSTON MARROW—98 days

FLESH—Fine grained, thick, moist and orange golden in color.

FRUIT—12" to 14" long, 9" to 12" in diameter, looks like Hubbard in size, weighs about 6 to 9 pounds.

USE—Freezing and canning.

GOLDEN DELICIOUS—105 days

FLESH—Orange to yellow, medium grained, thick, dry, good quality.

FRUIT—10" to 12" long, 8" to 10" in diameter, skin hard and smooth, weighs 6 to 9 pounds.

USE—Freezing and canning.

RED or GOLDEN HUBBARD—110 days

FLESH—Fine grained, dry, thick, deep orange yellow.

FRUIT—10" to 12" long, 8" in diameter, hard, warted, orange color, and weighs 9 to 10 pounds.

USE—Freezing and canning.

TOMATO

BONNY BEST (Chalk's Early Jewell)—(John Baer)—75 days

VINE—Medium size, giving only fair coverage to fruit.

FRUIT—Medium size, smooth, small cored, solid flesh, free from circular cracking, good scarlet color and quality.

GREATER BALTIMORE—83 days

VINE—Very vigorous, large bushy vine. Very productive.

FRUIT—Large, smooth, solid deep flat tomato with excellent red color.

MARGLOBE—80 days

VINE—Vigorous, erect large plants, productive and resistant to Fusarium Wilt.

FRUIT—Medium to large, deep scarlet, smooth and has very solid flesh. White fibers show up on inside flesh and should be allowed to fully ripen to get the best color for canning.

PRITCHARD—76 days

VINE—Very bushy because of their self-pruning or self-topping method, very productive, medium dark green and resistant to wilt.

FRUIT—Globe shape, flattened at base, medium size, outer color good red, interior color deep red.



Selected Cannery Strain of Rutgers

RUTGERS—75 days

VINE—Bushy growth, vigorous, very productive.

FRUIT—Medium large, dark scarlet, very solid and firm, good interior color which makes it very desirable for canners.

SIOUX or EARLY RED—70 days

VINE—Leaves are finely divided, ripens uniformly.

FRUIT—Medium size, thick walled, red, globular, juicy and good flavor.

STOKESDALE—72 days

VINE—Some spreading, medium size, medium green, productive.

FRUIT—Almost globe shape, medium size, solid flesh, bright scarlet.

STONE, IMPROVED—84 days

VINE—Large plant, vigorous, very productive.

FRUIT—Large scarlet, solid, deep and flattened, smooth, good color

WISCONSIN NO. 55—75 days

VINE—Spreading type but possesses enough foliage.

FRUIT—Flatter than Marglobe and in the large size class. Very good interior color. Quite free from cracking and ridging.

RUTABAGA

AMERICAN PURPLE TOP—90 days

TOPS—16" to 20", upright, vigorous, smooth, cut leaved, medium short neck.

ROOTS—5" to 7" in diameter, smooth, deep purplish above ground, yellowish below, good keeper.

USE—Canning.

TURNIP

PURPLE TOP WHITE GLOBE—56 days

TOPS—14" to 20" high, medium green, erect growth.

ROOTS—5" to 6" in diameter, clear white with purplish tinged red top, globular shaped, flesh is snow white, tender and crisp.

USE—Roots for canning, leaves canned for greens.

SHOGGIN—42 days

TOPS—18" to 20" high, quick growing, strap leaved, bright green.

ROOTS—2" to 2½" in diameter, oval, small, snowy white, tender and crisp.

USE—Leaves canned as greens.

REFERENCE TABLES

Quantity of Seed Requisite to Produce a Given Number of Plants and Sow an Acre

Quantity Per Acre		Quantity Per Acre	
Artichoke, 1 oz. to 500 plants.....	6 oz.	Hemp	½ bu.
Asparagus, 1 oz. to 800 plants.....	4 lbs.	Horse-Radish Roots	10,000 to 15,000
Asparagus Roots	1000 to 7250	Kale, 1 oz. to 5,000 plants.....	4 lbs.
Barley	2 bu.	Kohl-Rabi, ½ oz. to 100 ft. of drill.....	4 lbs.
Beans, Dwarf, 1 lb. to 100 ft. of drill....	60 lbs.	Leek, 1 oz. to 100 ft. of drill.....	4 lbs.
Beans, Pole, ½ lb. to 100 hills.....	30 lbs.	Lettuce, ¼ oz. to 100 ft. of drill.....	3 lbs.
Beet, Garden, 1 oz. to 100 ft. of drill....	7 lbs.	Melon, Musk, 1 oz. to 100 hills.....	3 lbs.
Beet, Mangel, 1 oz. to 100 ft. of drill....	5 lbs.	Melon, Water, 4 oz. to 100 hills.....	3 lbs.
Broccoli, 1 oz. to 5,000 plants.....	2 oz.	Nasturtium, 2 oz. to 100 ft. of drill.....	15 lbs.
Brussels Sprouts, 1 oz. to 5,000 plants....	3 oz.	Okra, 2 oz. to 100 ft. of drill.....	10 lbs.
Buckwheat	1 bu.	Onion Seed, ½ oz. to 100 ft. of drill....	4 to 5 lbs.
Cabbage, 1 oz. to 4,000 plants.....	2 oz.	Onion Seed for sets.....	40 to 80 lbs.
Carrot, 1 oz. to 100 ft. of drill.....	3 to 4 lbs.	Onion Sets, 1 qt. to 40 ft. of drill.....	8 bu.
Cauliflower, 1 oz. to 2,500 plants.....	4 to 6 oz.	Parsnip, ½ oz. to 100 ft. of drill.....	3 lbs.
Celery, 1 oz. to 6,000 plants.....	4 oz.	Parsley, ¼ oz. to 100 ft. of drill.....	3 lbs.
Chicory	4 lbs.	Peas, Garden, 1 lb. to 100 ft. of drill....	1 to 3 bu.
Clover, Alsike and White Dutch.....	6 lbs.	Peas, Field	2 bu.
Clover, Crimson	10 to 15 lbs.	Pepper, 1 oz. to 1,500 plants.....	4 oz.
Clover, Large Red and Medium.....	8 to 12 lbs.	Pumpkin, 4 oz. to 100 hills.....	3 to 4 lbs.
Collards, 1 oz. to 5,000 plants.....	4 oz.	Radish, ⅓ oz. to 100 ft. of drill.....	8 to 12 lbs.
Corn, Sweet, 1 pound to 200 hills.....	7 to 10 lbs.	Rye	1½ bu.
Cress, ¾ oz. to 100 ft. of drill.....	12 lbs.	Salsify, ¾ oz. to 100 ft. of drill.....	8 lbs.
Cucumber, 1 oz. to 100 hills.....	1 to 3 lbs.	Spinach, 1 oz. to 100 ft. of drill.....	10 to 15 lbs.
Egg Plant, 1 oz. to 2,000 plants.....	4 oz.	Summer Savory	¾ lb.
Endive, 1 oz. to 100 ft. of drill.....	3 to 5 lbs.	Sunflower	8 lbs.
Grass, Blue, Kentucky.....	30 to 40 lbs.	Squash, Summer, 4 oz. to 100 hills.....	2 lbs.
Grass, Hungarian and Millet.....	25 lbs.	Squash, Winter, 8 oz. to 100 hills.....	2 lbs.
Grass, Mixed Lawn.....	100 lbs.	Tomato, 1 oz. to 2,000 plants.....	2 oz.
Grass, Red Top, Fancy, Clean.....	8 to 10 lbs.	Tobacco, 1 oz. to 5,000 plants.....	2 oz.
Grass, Timothy	10 lbs.	Turnip, 1 oz. to 100 ft. of drill.....	2 lbs.
Grass, Orchard, Perennial Rye and Wood Meadow	2 bu.	Vetch	2 bu.

MEASUREMENT OF AN ACRE

The following will be found useful in arriving at accuracy in estimating the amount of land in different pieces of ground under cultivation: 5 yards wide by 968 yards long contains 1 acre, as do also the following measurements: 10 yards wide by 484 yards long; 20 yards wide by 242 yards long; 40 yards wide by 121 yards long; 70 yards wide by 69½ yards long; 60 feet wide by 726 feet long; 110 feet wide by 396 feet long; 120 feet wide by 363 feet long; 220 feet wide by 198 feet long; 240 feet wide by 18½ feet long, and 440 feet wide by 99 feet long.

NUMBER OF PLANTS OR TREES TO THE ACRE AT GIVEN DISTANCES

Dis. Apart	No. Plants	Dis. Apart	No. Plants	Dis. Apart	No. Plants
12x 1 in.	522,720	30x16 in.	13,068	48x36 in.	3,630
12x 3 in.	174,240	30x20 in.	10,454	48x48 in.	2,723
12x12 in.	43,560	30x24 in.	8,712	60x36 in.	2,901
16x 1 in.	392,040	30x30 in.	6,970	60x48 in.	2,178
18x 1 in.	348,480	36x 3 in.	58,080	60x60 in.	1,743
18x 3 in.	116,160	36x12 in.	14,520	8x 1 ft.	5,445
18x12 in.	29,040	36x18 in.	9,680	8x 3 ft.	1,815
18x18 in.	19,360	36x24 in.	7,260	8x 8 ft.	680
20x 1 in.	313,635	36x36 in.	4,480	10x 1 ft.	4,356
20x20 in.	15,681	42x12 in.	12,446	10x 6 ft.	726
24x 1 in.	261,360	42x24 in.	6,223	10x10 ft.	435
24x18 in.	15,520	42x36 in.	4,148	12x 1 ft.	3,630
24x24 in.	10,890	48x12 in.	10,890	12x 5 ft.	736
30x 1 in.	209,088	48x18 in.	7,790	12x12 ft.	302
30x 6 in.	34,848	48x24 in.	5,445	16x 1 ft.	2,722
30x12 in.	17,424	48x30 in.	4,356	16x16 ft.	170

